§ 109.201

(18) For column stabilized units, a description, a schematic diagram, and guidance for the operation of the ballast system and of the alternate means of ballast system operation, together with a description of their limitations, such as pump capacities at various angles of heel and trim.

(19) A description, a schematic diagram, and guidance for the operation of the bilge system and of the alternate means of bilge system operation, together with a description of their limitations, such as spaces not connected

to the bilge system.

- (20) General arrangement plans showing the location of: Watertight and weathertight compartments, and openings in the hull and structure; vents, closures, and mechanical, ventilating, and electrical emergency shutdowns; flooding alarms and fire and gas detectors; and access to different compartments and decks.
- (21) A list of emergency shutdowns and guidance on restarting all mechanical, ventilating, and electrical equipment after activation of the emergency shutdowns.
- (22) Procedures for evacuating personnel from the unit.
- (23) A plan showing the hazardous locations described in §111.105-33 of this chapter.
- (24) A schematic diagram of the emergency power system.

(Approved by the Office of Management and Budget under control number 2115-0505)

[CGD 83-071, 52 FR 6979, Mar. 6, 1987; 52 FR 9383, Mar. 24, 1987, as amended by CGD 95-028, 62 FR 51208, Sept. 30, 1997]

Subpart B—Tests, Drills, and Inspections

§ 109.201 Steering gear, whistles, general alarm, and means of communication.

The master or person in charge shall ensure that—

- (a) Steering gear, whistles, general alarm bells, and means of communication between the bridge or control room and the engine room on self propelled units are inspected and tested—
- (1) Within 12 hours before getting under way; and
- (2) At least once each week if under way or on station; and

(b) Whistles and general alarm bells on all other units are inspected examined and tested at least once each week.

§109.203 Sanitation.

- (a) The master or person in charge shall insure that the accommodation spaces are in a clean and sanitary condition.
- (b) The chief engineer, or engineer in charge if no chief engineer is required, shall insure that the engineering spaces are in a clean and sanitary condition.

§ 109.205 Inspection of boilers and machinery.

The chief engineer or engineer in charge, before he assumes charge of the boilers and machinery of a unit shall inspect the boilers and machinery, other than industrial machinery, and report to the master or person in charge and the Officer in Charge, Marine Inspection, any parts that are not in operating condition.

§ 109.209 Appliances for watertight integrity.

- (a) Before getting underway, the master or person in charge shall insure that each appliance for watertight integrity is closed and watertight.
- (b) If existing conditions warrant, the master or person in charge may permit appliances for watertight integrity to be open while afloat.

§ 109.211 Testing of emergency lighting and power systems.

- (a) The master or person in charge shall insure that—
- (1) Each emergency lighting and each emergency power system is tested at least once each week;
- (2) Each emergency generator is tested at least once each month by operating it under load for at least 2 hours; and
- (3) Each storage battery for emergency lighting and power systems is tested every six months under actual connected load for a period of at least 2 hours.
- (b) After the 2 hour test period required in paragraph (a)(3) of this section, the voltage values under load or specific gravity of electrolyte must be

measured. Measured values must be extrapolated to approximate the values that would result following a 12 hour test period. The test must be extended if a trend cannot be determined to allow extrapolation. The capacity of the battery corresponding to the extrapolated values of voltage or specific gravity must be sufficient to supply the actual connected load.

§ 109.213 Emergency training and drills.

- (a) Training materials. Abandonment training material must be on board each unit. The training material must consist either of a manual of one or more volumes, written in easily understood terms and illustrated wherever possible, or audiovisual training aids, or both as follows:
- (1) If a training manual is used, a copy must be made available to each person on board the unit. If audiovisual training aids are used, they must be incorporated into the onboard training sessions described under paragraph (g) of this section.
- (2) The training material must explain, in detail— $\,$
- (i) The procedure for donning lifejackets, immersion suits, and anti-exposure suits carried on board;
- (ii) The procedure for mustering at the assigned stations;
- (iii) The procedure for boarding, launching, and clearing the survival craft and rescue boats;
- (iv) The method of launching from within the survival craft;
- (v) The procedure for releasing from launching appliances;
- (vi) The method and use of water spray systems in launching areas when required for the protection of aluminum survival craft or launching appliances:
 - (vii) Illumination in launching area;
- (viii) The use of all survival equipment:
- (ix) The use of all detection equipment for the location of survivors or survival craft;
- (x) With illustrations, the use of radio lifesaving appliances;
- (xi) The use of sea anchors;
- (xii) The use of engine and accessories;

(xiii) The recovery of survival craft and rescue boats, including stowage and securing;

(xiv) The hazards of exposure and the need for warm clothing;

(xv) The best use of the survival craft for survival:

(xvi) The methods of retrieval, including the use of helicopter rescue gear (slings, baskets, stretchers), and unit's line throwing apparatus;

(xvii) The other functions contained in the muster list and emergency instructions; and

(xviii) The instructions for emergency repair of the lifesaving appliances.

- (b) Familiarity with emergency procedures. Each of the crew members and industrial personnel with assigned emergency duties on the muster list must be familiar with their assigned duties before working on the unit.
- (c) *Drills—general*. (1) Drills must, as far as practicable, be conducted as if there were an actual emergency.
- (2) Each of the crew members and industrial personnel must participate in at least one abandonment drill and one fire drill every month. Drills must take place within 24 hours of a change in crew or industrial personnel if more than 25 percent of the persons on board have not participated in an abandonment and fire drills on board the unit in the previous month.
- (3) Drills must be held before the unit enters service for the first time after modification of a major character, or when a new crew is engaged.
- (d) Abandonment drills. (1) Abandonment drills must include the following:
- (i) Each drill must include summoning of industrial personnel and crew to muster stations with the general alarm, followed by drill announcements on the public address or other communication system, and ensuring that all on board are made aware of the order to abandon ship.
- (ii) Each drill must include reporting to stations and preparing for the duties described in the muster list.
- (iii) Each drill must include checking that industrial personnel and crew are suitably dressed.
- (iv) Each drill must include checking that lifejackets or immersion suits are correctly donned.